

REMARKS

As a preliminary matter, the Examiner objected to the drawings as failing to reference FIG. 9 in the specification. Accordingly, Applicant amended the specification on page 29 to reference the figure. No new matter has been added.

The Examiner also objected to the specification for not capitalizing JAVA® in the application. Accordingly, Applicant amended the specification to capitalize the trademark, and further inserted generic terminology. For these reasons, withdrawal of the objections to the drawings and specification is respectfully requested.

Applicant traverses the objection to the Abstract because the present Abstract has less than 150 words. Applicant respectfully requests withdrawal or further explanation.

As a further preliminary matter, Applicant requests acknowledgement that all certified copies of the priority document have been received since priority is based on §119 of JP Application No. 2000-012599, filed January 21, 2000, a certified copy of which was enclosed with Applicant's December 8, 2000 filing of this application.

In light of the amendments to the claims, the rejection of claims 1-4, 7-8, 10, 12, 14, and 16 under §§112 and 102(e) are considered moot.

Claims 5-7, 9, 11, 13, 15, and 17 stand rejected under 35 U.S.C. 103(a) as being obvious over Sauntry et al. (U.S. Patent No. 6,349,344), in view of Crelier (U.S. Patent No. 5,978,585). Applicant traverses the rejection because the cited references fail to disclose or suggest, among other things, that functions contained in a source program are stored in

machine language expressions, which can be directly executed, such that they are associated with time and date indications that indicate the time and date at which the associated function is last revised.

The Examiner correctly identifies on page 10 of the Office Action (Paper No. 4) that Sauntry fails to disclose details regarding updating and the use of date and time for an apparatus having an execution unit for executing machine language. The Examiner cites Crelier as disclosing in the Abstract update date and time of a source program compiled by a compiling unit and a determination unit that determines whether or not the update date and time of the source program matches an update date and time corresponding to the machine language stored in the storage unit. However, Crelier does not teach storing as machine language, but rather stores compiled files as JAVA byte code (see the Abstract, lines 6-12). Crelier fails to teach or suggest functions contained in a program that are associated with time and date indications indicating the time and date at which the program has been revised, as in the present invention.

In Crelier, if the time/date has not changed, a method examines a compiled file corresponding to the source. If no file is found, then a system will proceed to compile a source for generating an initial class file. If the class file is already present and its date has not changed apart from the recompilation of the source, then the system can examine all imports for a class. After looping through all imports, the system checks that the root class remains consistent with the imports, and if not, then the system must recompile (Col. 10, lns.

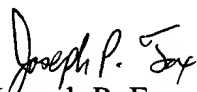
18-54). The above-described process results in longer processing times as compared to the present invention.

That is, the present invention discloses an apparatus or method that features functions contained in a source program being stored in machine language expressions, which are associated with time and date indications that indicate the time and date at which the associated function is last revised, before the function is compiled. Since the present invention has the function saved in machine language, and the source program is analyzed through the determination unit, which determines the update date and time for each function, the present invention advantageously processes information more quickly than the process disclosed by Crelier. This is because the present invention has the function stored in machine language that is immediately executable, whereas Crelier has to analyze (i.e., interpret its code through a virtual machine program) to achieve machine language for each function, which is then able to be executed. Accordingly, the present invention advantageously provides a more detailed management of the stored functions, and spends less time compiling. For these reasons, withdrawal of the §103 rejection of claims 5-6, 9, 11, 13, 15 and 17 is respectfully requested.

For all of the foregoing reasons, Applicant submits that this Application is in condition for allowance, which is respectfully requested. The Examiner is invited to contact the undersigned attorney if an interview would expedite prosecution.

Respectfully submitted,

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